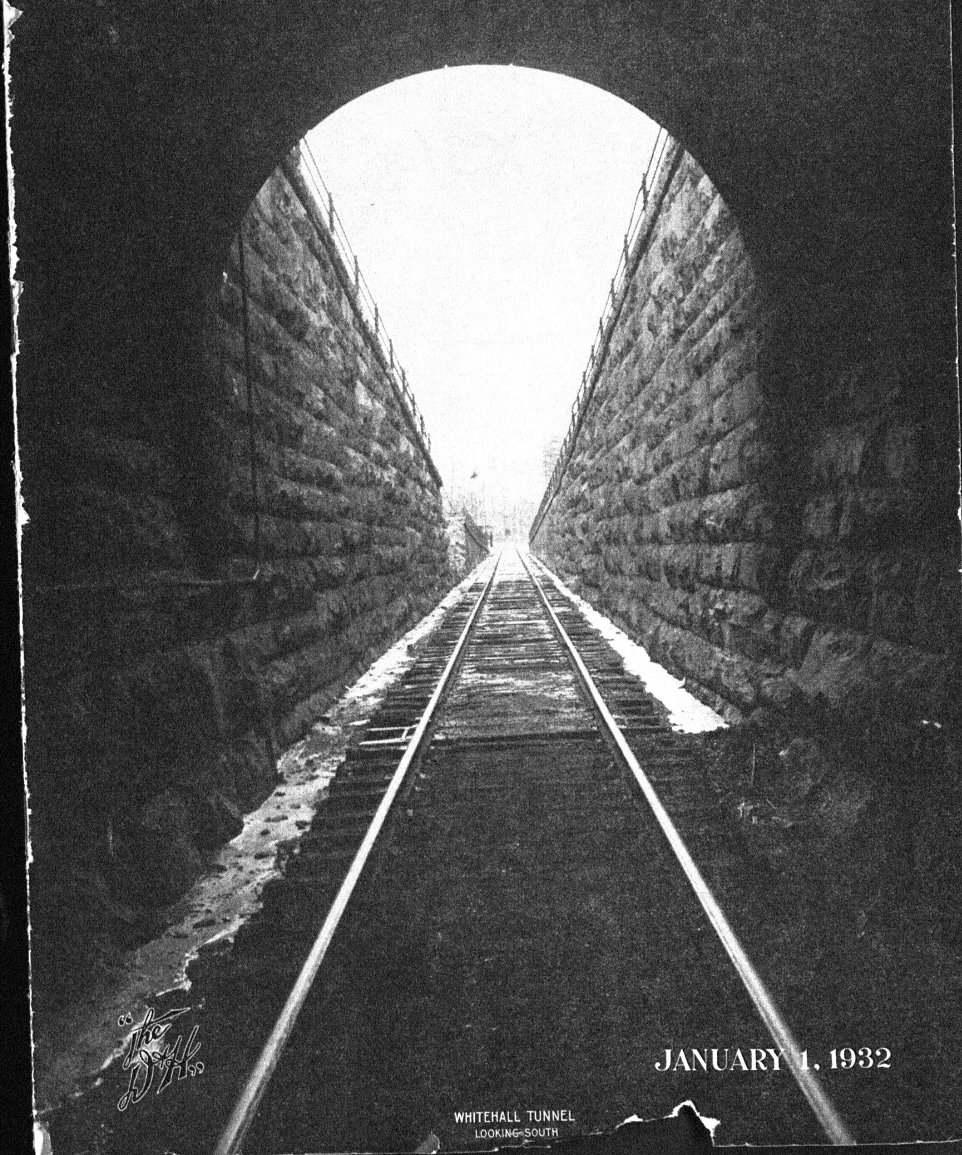
THE DELAWARE AND HUDSON RAILROAD BULLETIN



WHITEHALL TUNNEL
LOOKING SOUTH

"the D & H"

JANUARY 1, 1932

1931

ANOTHER milestone we have passed along life's road;
And, as we pause to take fresh hold and shift the load,
Let us not squander too much time in looking back
Upon our fading footprints or the feeble track
We might have left behind us on the sands of time:
The traveled road is but a passing pantomime.
The future holds the fate of man; the past is dead!
Let's keep our eyes upon the path that lies ahead.
The way of life leads ever on to newer things;
And we shall find that each succeeding milestone brings
New rectitude, new hope, new courage and the will
To face our problems with a greater faith and skill.

—ANON.

1932

"the D&H" *The* DELAWARE AND HUDSON RAILROAD CORPORATION "the D&H"
BULLETIN

On the Old Chateaugay

Thrills Aplenty Recalled by Veteran of Narrow Gauge Road

HENRY B. RAYMOND

NOWHERE on earth was railroading ever a more exciting adventure than on the Chateaugay Railroad before its three-foot six-inch gauge was standardized in 1903," says HENRY B. RAYMOND, retired Fuel Foreman at Plattsburgh. The steepest grade, reaching a maximum of 3 per cent, and some of the sharpest curves on the Delaware and Hudson system are to be found even now on this 83-mile line starting on Lake Champlain at Plattsburgh, crossing the lofty Adirondacks, and terminating at Lake Placid.

Scarcely a day passed when the Chateaugay crews did not meet with some thrilling experience such as trying to stop a runaway car or train, of timber or iron ore. A hazard at any time, a runaway was doubly dangerous on that old narrow gauge track. Furthermore, when Plattsburgh had a snow flurry, there was a heavy storm on the Chateaugay; when Lake Champlain was blotted out by swirling flakes, the Adirondacks were gripped by an icy blizzard.

The most exciting ride in MR. RAYMOND'S experience came one day while he was conductor on a 13-car train of pig iron descending the steep, ten-mile grade at Dannemora. They were traveling at a fairly rapid pace when it was realized that the hand brakes would not hold—this was before the day of air brakes. Quickly the train gained momentum until, traveling at a mile-a-minute speed, a car of ore left the track at Gougeville Crossing. They were going so fast that it was hurled clear of the track and the train, the link and pin couplers letting go. The cars behind closed the gap with a terrific impact and their mad race continued.

At Cadyville the balance of the train, unable to hold the rails any longer, was derailed. The cars went to one side of the right of way and were completely demolished. Engine 540, with its crew, a trainman, and Conductor RAYMOND aboard went off on the other side, turned at right angles to the track, and buried its nose completely in the soft sand bank. The black, sticky fuel oil from the tender oozed out over the otherwise uninjured crew before they could struggle free from the wreckage.

Operating those hand brakes at night, a feeble lantern in one hand and a heavy brake club grasped in the other, called for a high degree of experience and skill. One cold winter night MR. RAYMOND started over the train and, while climbing down the end of a car of poles, became caught. He dared not struggle for fear of slipping under the wheels, yet if he stayed he might freeze to death. At last he mustered all his strength for a final effort, and succeeded in crawling into the cab completely exhausted.

Winter invariably brought a series of perilous, although sometimes humorous adventures in its wake. One day MR. RAYMOND was sent out of Plattsburgh with a snow plow, ordered to clear the road through to Saranac Lake. At Standish another engine was coupled in to help them through the drifts which were as high as the cab. MR. RAYMOND told the trainman he had better come up in the plow instead of riding on the engine where he might get hurt. The latter insisted on staying in the cab, so MR. RAYMOND returned to the plow.

A few minutes later, in bucking a particularly obstinate drift at Loon Lake, the plow buckled, the roof raising several feet in the air. The engineer and fireman escaped unhurt but the trainman could not be found. When they had about given up hope of finding him someone noticed a man's arm protruding from a gaping hole in the snow plow roof, through which he had plunged when thrown from the cab by the force of the impact of the plow against the drift. Aside from a few minor burns, which proved that he had been on the engine when the mishap occurred, he was unhurt. They went back to Plattsburgh for another plow but the second was split in two about a quarter of a mile from the scene of the first accident.

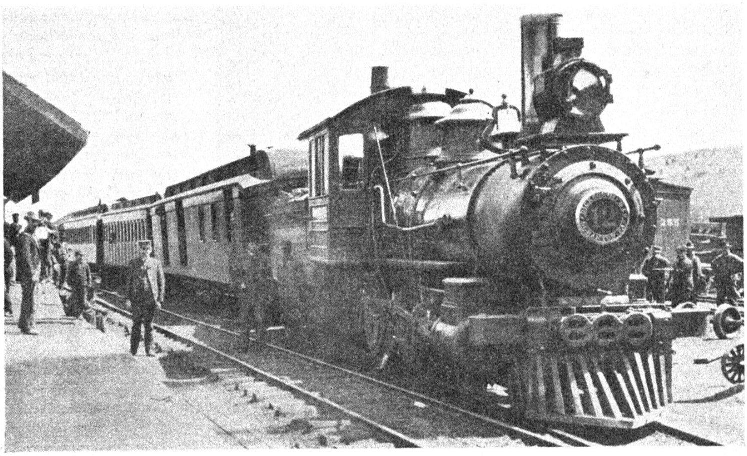
Another night MR. RAYMOND was sent to the rescue of six engines which had been caught in the snow at Russia. His engine became frozen to the rails, too, so they shoveled snow into the tender all night in a vain effort to keep her alive. Just before dawn the tender went dry and they had to dump the fire.

MR. RAYMOND'S early life was spent near his birthplace at Clintonville, Clinton county, about sixteen miles from Plattsburgh. His father was an ironmaker by trade. Iron ore was smelted in charcoal fires into what were known as "loops," 300-pound "doughnuts" of iron, which were later worked into commercial sizes under heavy trip-hammers.

After completing his common school education, HENRY went to work in the iron rolling mill at Saranac, N. Y. Here the "loops" were heated and rolled into merchant bar iron for use in plants manufacturing sled runners, wagon tires, and similar items. Other metal was put through the rollers, driven by a giant water wheel, to be worked down to pieces four feet long by one inch square. It was then shipped to Plattsburgh where it was made into horseshoe nails. Not long after HENRY

(Concluded on Page 14)

Narrow-Gauge Train on the Chateaugay in the 80's



By Eight Weeks' Margin!

Aluminum Manufacturing Process Is Credited to American Inventor

PROFESSOR! I've got it!" exclaimed a young man, bursting excitedly into the private laboratory of the head of the chemistry department of an Ohio college, on the morning of February 23, 1886. Extending his cupped hand, he proudly exhibited to the astonished professor half a dozen little globules of a silver-colored metal.

It was no wonder he was excited, or that his excitement was shared by the incredulous professor, for at 22 years of age he had achieved what some of the world's greatest scientists had failed to accomplish after half a century of application to the same problem. Where they had enjoyed the facilities of great laboratories, with all manner of scientific equipment, and yet had failed, this 22-year-old American youth had worked out the problem in the woodshed in his back yard, with the crudest kind of equipment.

It all came about as the result of a chance remark made by Frank Fanning Jewett, his chemistry professor at Oberlin College, one morning during the young man's senior year. In talking with the students in his chemistry class Prof. Jewett made the offhand observation that if anyone should invent a process by which aluminum could be made on a commercial scale, he would not only be a benefactor to the world, but he would also be able to lay up for himself a great fortune.

Serious-minded Charles Martin Hall nudged a classmate and whispered, "I'm going for that metal."

Go for it he did, and in dead earnest. Discovering a cheap method of producing aluminum became an obsession with him. Had he known that he was racing with another young man, across the seas, and had he realized how nearly the two would tie each other, he would scarcely have slept during the next year! As it was, he spent much of his spare time outside of school hours in the college laboratory working doggedly on the problem, for he had read somewhere that every clay bank was potentially a mine of aluminum, and that the metal was as costly as silver.

But all his application, and all his admitted genius, and all his knowledge of chemistry, seemed of no avail against this aluminum riddle. "Going for it" was one thing, but getting it was quite another. All avenues seemed to lead to failure.

If aluminum could not be extracted inexpensively by the chemical process with which scientists had been struggling for half a century, and with which he had worked unsuccessfully for so many months, might it not be done by electricity? That was a new idea. It seemed worth investigating.

Hall lost no time in fitting up the woodshed of his father's house as a laboratory. Borrowing an odd assortment of battery jars and plates from the college laboratory, and buying a small crucible, he set them along the edge of the upper floor of the two-story woodshed, so that he could stand while at work on the lower steps and oversee both levels. Then he set up a home made furnace and bellows.

At last, however, everything was ready for an entirely new experiment. Melting some cryolite in his little clay crucible, and dissolving some refined aluminum ore in it, he switched on his batteries and passed the electric current through the molten mass for about two hours. We can imagine with what impatience he paced up and down in the woodshed during those two hours!

Finally the time was up and he poured out the molten mass. Alas! There was no aluminum! But he was not discouraged. Indeed, it is said of Charles Martin Hall that he was never discouraged for more than a few hours at a time.

He started to think his way into the problem. He came to the conclusion that there might be some impurities in his clay crucible and they might be affecting the result. Promptly he constructed a carbon lining for the crucible and he proceeded to repeat the experiment.

Again he waited impatiently for two hours as the current from his makeshift batteries passed through the molten mass. Again he poured out the material, eagerly, hopefully. Could he believe his eyes? There in the bottom of the crucible, were a number of small globules of aluminum!

Excitedly he called his sisters and showed them the still hot little "buttons" of aluminum. Then he ran with them to the college, where he burst in upon Professor Jewett with the startling news.

That day—February 23, 1886—marked the birth of a new metal age that was to revolutionize mechanical development. Two months later to the day—April 23, 1886—a French chemist, Paul L. T. Heroult, also 22 years of age, applied for a French patent on the identical process.

Charles Martin Hall had won fame and fortune by a margin of eight weeks.—*Industrial Arts.*

PRICES AND WAGES
UNITED STATES, 1800-1931

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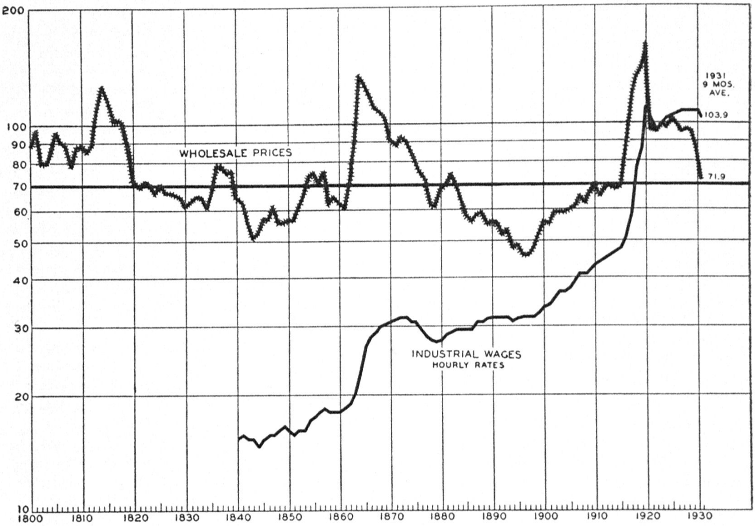
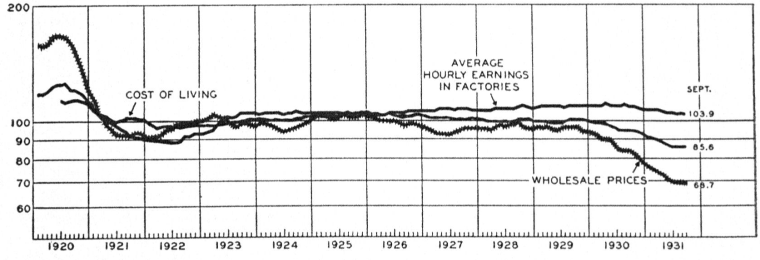
ANNUAL INDEX NUMBERS, 1800-1931
BASE, 1923=100



MONTHLY INDEX NUMBERS, 1920-1931
BASE, 1923=100



N. I. C. B. CHART SERVICE—CHART NO. 265.
NOVEMBER, 1931.

Wages and Prices

Or, When is a Dollar Not Worth a Dollar?

THE reasons why it is impossible to "legislate prosperity" become readily apparent from a study of the upper portion of the accompanying chart.

The upper irregular line, "Wholesale Prices," shows clearly how, following the Revolutionary War, 1776-1783, prices were higher than the average "70" indicated by the heavy horizontal line. As the result of the War of 1812 and the Napoleonic Wars in Europe, they again soared, returning to what may be termed normal conditions in 1821.

"Wild speculation in wild land," bought with the expectation of an immediate increase in value, raised a hill in the price curve in 1836-37. The panic of 1837, represented by the dip downward until 1843, was followed by a gradual increase in prices, with minor fluctuations caused by political conditions, until the election of Buchanan in 1856. The slavery question culminating in the Civil War, so unsettled conditions as to cause a low point in the commodity price curve in 1861, from which it soared to previously unheard of heights in 1864.

A fairly steady decline continued until new low prices were reached following the panic of 1873—which again resulted from extravagant speculation in a country burdened with a load of paper money—a low point showing on the chart in 1879.

To understand the rise of prices between 1879 and 1882 we must return for a moment to the close of the Civil War in 1865. At that time the North had over a million men in arms. The loss from combat and disease had been about 300,000. Southern losses are estimated to be about the same as for the North. The national debt was $2,850,000,000, besides which nearly $800,000,000 had been raised by taxation during the four years of the conflict. The government, reluctant to increase taxes further, resorted to issuing legal-tender paper money. As a result, in July 1864 a gold dollar was worth $2.65 in paper, prices of goods of all sorts were correspondingly high and speculation was encouraged.

Consequently the resumption of specie payments by the government in 1879 restored the confidence which had been lost during the panic of 1873, and caused an upturn in the curve from 1879 to 1883, with the exception of which the general trend was downward until the panic of 1893.

It will be seen from the chart that the effects of this were felt until the opening of the War with Spain in 1898, which was of such a minor nature that no economic disturbance followed its wake. The panic of 1907 was so localized that its effect on wholesale prices is marked by only a slight waver in the curve which continued upward until 1914.

The World War so disrupted trade conditions and the production of both raw materials and manufactured products that prices soared to new all-time highs by 1920, rapidly seeking their former level the year following. The extension of credit encouraged installment buying, both by individuals and nations, out of proportion to their inability to produce. Again an orgy of speculation resulted, culminating in the financial and economic crisis through which we are now passing.

From the chart the trend of hourly rates of pay in industries, other than agriculture, may also be seen. Starting from 1840 the wage curve, plotted by the U. S. Bureau of Labor Statistics, shows a definite tendency to follow the fluctuations of wholesale prices, although to a lesser degree. Since 1923 it has ranged above the price curve and stands now only slightly below the peak of the past ninety years.

The portions of the two curves covering the past ten years are shown below, page 6, in greater detail, and a third line, representing the Cost of Living, has been introduced. From this it will be noted that all three lines cross the "dollar mark" or 100 ordinate in the summer of 1923. On the basis of the 1923 dollar, therefore, the average worker receives 103.9 per cent of his 1923 wages while it costs but 85.6 per cent as much to live as in 1923, wholesale prices being but 68.7 per cent as high as they were eight years ago.

On page 8 are shown plotted basic commodity prices during the three years 1920-22, and below, on the same charts, the prices of these same commodities during 1929-31 inclusive.

For purposes of reference a dotted line shows the 1913 average, which is also, in most cases, the averages for the past century. That is why 1913

PRICE MOVEMENTS
MINERAL PRODUCTS, 1920-'21-'22 AND 1929-'30-'31

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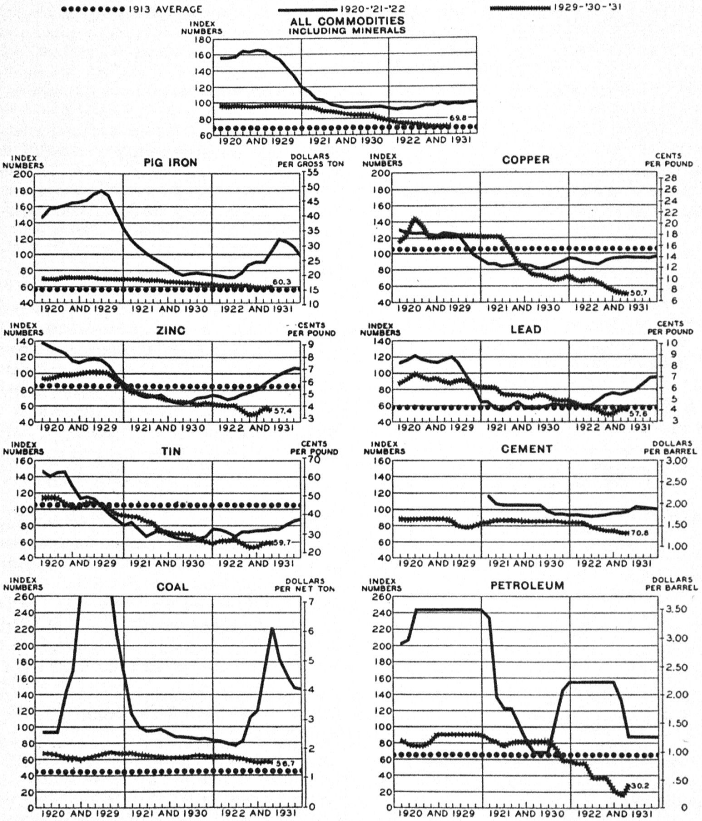

N. I. C. B. CHART SERVICE—CHART NO. 263.
OCTOBER, 1931.

figures are so frequently quoted when discussing such matters.

It will be noted that the prices of Pig Iron and Bituminous Coal have fluctuated but slightly in the past three years, and that both are now very close to the 1913 average figure.

"It is a well established principle that whether prices are at a high or low level is of comparatively little consequence insofar as current business operations are concerned, but that any changes in the level, and with greater reason the more acute changes, disturb economic relations," says a bulletin issued by the National Industrial Conference Board, Inc. "The recent sharp decline in commodity prices has therefore stimulated an interest in antecedent changes. Wars bring abnormal conditions, and then inflation of prices in war periods is clearly apparent in the chart. (Page 6).

"The reaction inevitably follows. After the Napoleonic Wars and after the Civil War the decline in prices was long continued. After the Great War the drop appeared to come to an end very soon, and a period of fairly stable prices ensued. Only time will tell whether the recent drop is to be regarded as the continuation of the movement begun in 1920 and temporarily interrupted, or whether it was an independent phenomenon, related to a more or less permanent price level that obtained from 1922 to 1929."

"It is significant that in the period from 1840 to 1931 industrial wage rates have moved upward with only slight interruptions, whether the price movement was up or down............"

John W. Love, in an article entitled "The Same Spooks Haunt Every Panic," printed in the December issue of *Nation's Business*, states that "wages and purchasing power are the measures of the nation's standard of living, but high wages are *results* not *causes* of prosperity."

How all this effects the individual employee is the question in which we are all most interested. Perhaps the best way to answer this query is to quote comparative family budgets for 1913 and 1931:

	1931	*1913*
Food	33%	43.1%
Housing	20%	17.7%
Clothing	12%	13.2%
Fuel and Light	5%	5.6%
Sundries	30%	20.4%

In the above tabulation the sundries largely represent the social habits of the spender.

Arcturus

THE romance of modern science was never more strikingly manifest than in the recent announcement that the wheels of the Century of Progress Exposition at Chicago in 1933 will be set in motion by power generated from the light beams which left the star Arcturus forty years ago. The powerful telescopic instruments of Yerkes Observatory will assist in performing this modern scientific miracle.

The rays of light which will be harnessed to open the great exposition left Arcturus at about the time of the World's Columbian Exposition in Chicago. They have since been rushing toward the earth at a speed which would circle the earth more than seven times in a second or span the vast distance between the earth and the sun in eight minutes; yet they are still thousands of millions of miles away and will not reach the earth until May, 1933.

Arcturus is one of the most interesting of the great suns of space. It is called "Job's Star," because it is mentioned twice in the Book of Job, in chapters 9 and 38. By aid of powerful telescopes and modern astronomical instruments, scientists have been able to measure its size, its distance from the solar system and its motion through space. They have found it to be a giant star, having a diameter of 20,000,000 miles, or 2,500 times that of the earth. It is 2,500,000 times more distant than the sun. A faint idea of its vast distance in space and its enormous size may be gained from the fact that an airplane flying at 200 miles an hour would require more than 1,300,000 years to reach it and thirty-six years to fly around it.

From the scientists' standpoint, the most remarkable fact about Arcturus is its rapid proper motion. This great star is rushing through space at the rate of 85 miles a second, or more than 7,000,000 miles a day—the most rapid motion of any first-magnitude star in the heavens—yet its distance from us is so great that its shift in the starry firmament could not be detected in a lifetime by the lay observer.—*Illinois Central Magazine*.

More of Which, Later!

"So this baby is a girl?" asked the minister who had come to dinner.

The proud man assented.

"And this other one—is it of the contrary sex?"

His wife's eye was on him, but with no thought of the wrath to come the man replied, "Yes, she's a girl, too."

The

Delaware and Hudson Railroad

CORPORATION

BULLETIN

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All communications should be addressed to the Supervisor of Publications, Delaware and Hudson Building, Albany, N. Y.

Vol. 12 January 1, 1932 No. 1

Another Chance

WITH every rising of the sun,
Think of your life as just begun,
The past has cancelled and buried deep
All yesterdays. There, let them sleep.
Concern yourself with but today.
Grasp it, and teach it to obey
Your will and plan. Since time began,
Today has been the friend of man.

—ANON.

We Resolve—

AGAIN we have a New Year before us. What are we going to do with it?

It represents a new opportunity to start afresh, to do things as we know they ought to be done, to live as we want people to think we live.

The way to make a new start in anything is to start, the sooner the better, but the main thing is to START.

The coming of the New Year has been generally accepted as the most appropriate time to resolve to strive for things considered desirable but sometimes difficult of attainment. Broken resolutions, a day or a week later, all too often end these commendable though weak attempts at self-improvement. That is no reason why a new start cannot be made immediately. Perseverance is the quality that counts in such matters.

We must firmly resolve that what we have decided upon is what we are going to accomplish—and stick to that resolve. If we slip, start over again at once, not next year. Results are bound to follow.

Britain Speeds Up

BRITISH railroad service, always recognized as being about the fastest in the world, showed, for the first time last summer, a slightly higher rate of speed than has prevailed since 1914. On 65 selected runs the average during the summer season was fractionally up, and Britons, who have recently grown extremely sensitive on the question of preeminence in the matter of speed, are relieved.

The reproach of supplying rail service no faster than seventeen years ago still clings to the London, Midland and Scottish Railway and to the London, North Eastern. But the Great Western and the Southern make up the new record speeds, respectively, 2.12 per cent and 1.33 per cent higher than in 1914. The most brilliant performance on record nowadays is that of the afternoon train between Swindon, Wilts and Paddington Station, London, which covers the 77 miles in fractionally under 70 miles an hour. The locomotive is of the "Castle" type, and its consumption of coal—approximately 35 pounds a mile—seems to prove that high speeds are not necessarily wasteful of fuel.

The longest summer nonstop journey on a British railroad is that of the *Flying Scotsman,* which plies between London and Edinburgh, a distance of 392 miles. The speed of this train is, however, a matter of reproach to the railroads, since it makes only an average of 48.3 miles an hour.

The London-Carlisle nonstop run of 300 miles is better than 50 miles an hour, and the London-Plymouth nonstop run better still at 56.5 miles an hour over the 225-mile-journey.—*Erie Magazine.*

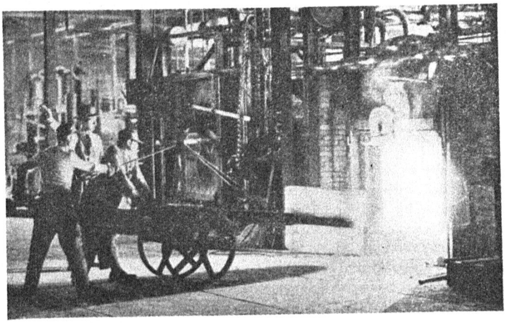
Ordered Your Index?

AN index to all articles, illustrations, and poems contained in the twenty-four issues of *The Bulletin* published during 1931 has been printed and is available for free distribution upon request to the Supervisor of Publications, Room 905, Delaware and Hudson Building, Albany, N. Y.

Readers who keep their *Bulletins* for reference purposes will find the index very useful.

Optical Glass

GLASS in all its various forms has become so common in our daily life that a few of us pause to consider its importance to our progress in civilization. Particularly is this true of optical glass. Yet this is one of the most influential silent partners of man, for from optical glass comes the lens, and from the lens a multiplicity of benefits without which we could not maintain the present height of our civilization.



Courtesy Bausch and Lomb Optical Company

Removing a pot of glass from the furnace

The lens gives wings to science; speeds production for the world's insatiable appetite; projects romance and adventure into millions of humdrum existences from brightly lighted silvered screens; writes vivid pictured history through the unerring eye of the camera; raises the shroud of darkness which otherwise would envelop the tremendous celestial cycles in which we live; administers to human ills; enlarges the sphere of usefulness and happiness of those whose eyes are weak or aged; focuses light to dispel the darkness-shrouded dangers for aviators who bring precious cargoes to earth safely. The lens has peered into every corner of our modern world; shown the way to wipe out the horrible plagues which once ravaged mankind; made possible the standardization of metal qualities; brought the criminal to justice; and in many other ways powerfully influenced our individual, industrial, and community lives.

Yet as important as it is to human welfare and happiness, optical glass is manufactured in only a very few places in the world. Three firms in Great Britain, one in Germany, and one in France make it. At present the only manufacturer in the United States producing optical glass in commercial quantities is the Bausch and Lomb Optical Company at Rochester, N. Y. The Bureau of Standards has successfully made it, but, of course, not in commercial quantities. This rarity of manufacture is not caused by the lack of demand for optical glass, for quite tremendous quantities are necessary every year, but by the almost

Courtesy Bausch and Lomb Optical Company

Six to eight months elapse before clay pots for glass making are ready unequalled difficulties in the making of it. For instance, every single constituent of the glass must be absolutely pure, and even those used in making the pots in which the glass is to be made have an effect on the finished product. The slightest trace of iron, for example, in any of the chemicals will turn the glass green, thus destroying the value of hundreds and hundreds of pounds of this very expensive product. Even with every engineering facility and laboratory control, 800 pounds of glass will yield only about 25 pounds of optical glass.

In 1912 the Bausch and Lomb Optical Company started serious experiments in the making of optical glass. Prior to that time, Mr. William Bausch had experimented with small crucibles with only slight success. But by 1914 results were so encouraging that two furnaces were built, each large enough to hold a pot containing about 600 pounds of glass of the ordinary density. This was of exceptional importance to the United States in the World War. Up to this time all optical glass had been of foreign manufacture. It was necessary not only for every day life but for our armies and navies. Therefore, a little before the beginning of the War, the Directors, respectively, of the Geophysical Laboratory and the Bureau of Standards at Washington offered the facilities of those bodies of scientists to Bausch and Lomb to aid in increasing the output of optical glass. If work had not already been done by Bausch and Lomb, it is quite probable that very little success would have attended their efforts for a long time, and our forces would have been very seriously handicapped. As it was, it was possible to start manufacturing binoculars, range finders, telescopes, and other military optical instruments almost immediately in the needed quantities.

Once determined, the chemical constituents of optical glass cannot be altered to any great extent. Experimentation at the present time must be along other lines. Boro-Silicate Crown as made at Rochester today has a transmission of 99.6 per cent per centimeter of thickness and represents one of the highest qualities of optical glass in the world. Within the last few years, the laboratory has been able to improve the color as well as the transmission of the glass, but most of the work has been done in adding greater stability so that it will stand up under atmospheric conditions or sunlight for longer periods. Scientists are now working on improving the crucibles in which the glass is melted, each kind of glass having a chemical effect on the crucibles. —By J. F. Brandt in *The Technology Review*.

Among Our Veterans

FIVE Delaware and Hudson veterans whose total length of service was 275 years, an average of 55 years apiece, all but two of whom are still in active service on the Pennsylvania Division, were the guests of honor of the Scranton Lodge of Elks at a recent luncheon served in the organization's club rooms. These old timers, together with their years of service, are: DAVID B. ROBBINS, 66; SEIGEL ROBBINS, 56; JUDSON FOSTER, 53; ORVILLE SKEELS, 51; and GEORGE WESTCOTT, 49.

MR. FOSTER, by the way, was the first man to sign an application blank for membership in the Delaware and Hudson Veterans' Association.

A score of citizens prominent in railroad and political circles in northeastern Pennsylvania were present to honor these men. Three other members of our veterans' organization, Divisional Car Foreman JOHN W. HOWARD, EDWARD CAFFERTY, and N. S. BURNS, aided in the entertainment. MR. HOWARD was song leader; MR. CAFFERTY presented several specialty dancing acts; while MR. BURNS told a number of humorous stories.

Pensions have recently been granted to six Delaware and Hudson employees, five of whom were members of the Maintenance of Way force; the other was a Transportation Department baggageman. The total service record of this group of veterans was 166 years, an average of 28 years each. The workers retired were:

Name	*Department*	*Occupation*	*Location*
Martin E. Dwyer	Maintenance of Way	Roadmaster	Green Island
James Kennedy	Maintenance of Way	Crossing Watchman	Fort Edward
William Purcell	Maintenance of Way	Crossing Watchman	Round Lake
Samuel G. Ray	Maintenance of Way	Crossing Watchman	Lake George
Charles S. Stahl	Maintenance of Way	Mine Cave Watchman	Pittston
John H. Weitzel.	Transportation	Baggageman	Wilkes-Barre

Who Owes Whom, What?

Extracts from "The Rescue of Germany" and "As Noble Lenders"

By GARET GARRETT

Published by The Saturday Evening Post

THE Dawes Plan, 1924, did not fix the amount of the reparations to be paid by Germany nor for how many years they were to be paid, but it did fix the reparations debt burden at $625,000,000 a year.

The Young Plan, 1929, reduced the amount of annual payments to $400,000,000.

The Hoover debt-holiday plan took effect on June 30, 1931. It cost the United States $250,000,000. To this the Federal Reserve Bank added a loan said to have been $50,000,000 and all Europe said "this is the beginning of the end of our hateful war debts to the United States." The one unalterable idea in the foreign policy of our World War associates is to get rid of their debts to the American Treasury.

Germany, having liquidatd her pre-war debt through the use of the depreciated mark, has, in the last six or seven years, borrowed about $4,000,000,000, of which nearly two-thirds has come from the United States. During this same period Germany has paid on account of reparations, by her figures $2,350,000,000.

The war cost the United States $25,000,000,000. During its duration we loaned our associates $7,000,000,000, and after the armistice we loaned them $2,500,000,000 more out of our Treasury. These war debts were subsequently funded on a basis that saddled the United States with a loss of about one-half of the original debt.

Counting our own direct war expenditures, the war loans, the post-armistice loans, and then the private lending since, Europe has cost us more than $40,000,000,000 in less than fifteen years. Is it any wonder that we are experiencing a depression?

What have we gained? Not the friendship of Europe. They have against us an ugly debtor mentality, and this is made much worse by the prejudiced manner in which it is exploited, not only by the press and the politicians, but by finance ministers, who cannot balance their budgets and by governments when it is necessary to increase taxes.

But the debts have to be paid. The only effect of a change would be to transfer the burden from European taxpayers to American taxpayers. If Europe does not pay, the American Government will have to. To whom? To the holders of Liberty bonds. They loaned the money to the American government and the American Government loaned it to Europe.

If American lending drys up, what will happen to Europe? She will have to live within her means.

What an American sees in Europe is still as it always was. Her weapons are better than her tools. With us it is exactly the reverse. Our tools are better than our weapons. That is one reason why we have anything to lend. It also holds out the invitation to the adventurous and strong to loot us.

Only international babies who are still on the bottle believe that we can plunge headfirst into Europe's economic troubles without getting smeared from head to foot with her politics.

Would it not be more logical to build up our own army and navy? Safety—and Charity—should begin at home.

Taxation is the white man's burden. It is rapidly becoming confiscation.

There is nothing the matter with America except damfoolishness. The cure is in the hands of the Commonsense Blues if they will use it. The Blues in contrast with the Reds and the Black Shirts.

Try It Yourself

A man with an uncanny mania for juggling with figures placed a pad of paper and a pencil in his friend's hands and said:

"Put down the number of your living brothers. Multiply it by two. Add three. Multiply the result by five. Add the number of living sisters. Multiply the result by ten. Add the number of dead brothers and sisters. Subtract one hundred and fifty from the result."

The friend did as directed.

"Now," said the other with a cunning smile, "the right figure will be the number of deaths, the middle figure the number of living sisters, and the lefthand figure the number of living brothers." So it was!

—*Exchange.*

In Appreciation

THE following letter, addressed to the editor of *The Christian Science Monitor,* shows that there are still travelers in our country who appreciate the comfort and security of railroad service and question the real need for taking the risks involved in other modes of transportation:

"In these days of change and flux, of hurry, of impatience at the slightest delay, when the airplane whisks one through space at an incredible speed, or the high-powered motor car races with a limited train and outdistances it, one hears frequently the remark, 'Why, I rarely travel by rail any more. Think of the time one saves by plane or motorcar!' Here one may recall the whimsical rejoinder of a Japanese gentleman, who was being urged by a hustling Occidental to rush and make a certain train and thereby save a few minutes. 'Ah,!' he said, 'and what will one do with those few honorable minutes?'

That is the question in a nutshell. What is usually done with the minutes spent or saved by these latter-day modes of rapid transit? To be sure, no sane thought would advance the suggestion that an emergency trip by air, for instance, enabling one to transact certain business expeditiously, is not a veritable godsend; but what has one to show generally for the time spent in transit in motorcar or airplane—the time which can be so profitably employed in the quieter and less distracting travel by train? The writer, despite a nomadic experience covering not a few years, still confesses to a near-thrill when he settles himself in a comfortable Pullman, exchanges a cheery greeting with a smiling porter (and has one ever seen a porter who could not be coaxed to smile?), gets out some books and papers and luxuriously waits for the train to start.

And what freedom from responsibility one feels in one of these splendidly equipped trains! Everyone who drives a motorcar knows that, as a rule, he is not a restful passenger with someone at the wheel other than himself. He finds himself 'putting on the brakes' or assuming some responsibility in watching the road. At all events, he does little or no reading and absolutely no writing while traveling thus. Result: Time lost in transit.

And what one misses who has not in some measure learned to know and admire his railroad brethren! Note the average engineer and fireman. Look up at them as they stand at the cab door or window at the end of a trip. Invariably one sees the picture of men who are temperate, honest, fearless and kindly. Surely such generals should have at least a passing salute from those whom they have carried safely to their destination.

Many times at night on a train the writer finds his thought going out in gratitude to those faithful sentinels in the engine cab who are making possible his safe and comfortable passage. And who has not, on some journey, learned to fathom the geniality and kindness in the heart of practically every conductor and brakeman? Readers and keen appraisers of men are generally these gentlemen of the iron rail. They know genuineness and true brotherliness when they see it, and invariably respond thereto. It is really a great family. One cannot but feel sorry for the man or woman who never makes its acquaintance.

And as for the one who has discarded, for other methods of transportation, the dependable, luxurious railroad train, with its precious gift of carefree moments for self-improvement, meditation, reading and a genuine rest—well, that is just too bad!—

JOHN RANDALL DUNN.

On the Chateaugay

(Concluded from Page 4)

went to the mill one of the furnace men left and he was given that job, paying the then unheard of wages $2.50 a day.

He worked there until the mill was closed. Today the spot is so overgrown with weeds and bushes that the passerby would never know that it was once a busy industrial site.

After working at odd jobs for several years, MR. RAYMOND entered Delaware and Hudson employ under Foreman James Bressett on a section including Plattsburgh yard and extending three miles up the Chateaugay. Two years later he was made foreman of the same section at $35 per month.

During the fall of 1896 MR. RAYMOND became a trainman on the Chateaugay, and in 1902 he was made extra conductor, running the work train while the Champlain Division tracks were being standardized.

In 1917 MR. RAYMOND left the train service to become Fuel Foreman at Plattsburgh where he was in charge of the coaling of 40 locomotives daily, Champlain Transportation Company steamboats in the summer, and supervising the distribution of fuel oil, used on Chateaugay locomotives between April and November. He continued at the coaling plant until his retirement on September 1, 1931.

MR. and MRS. RAYMOND, who now reside at 26 Macomb Street, Plattsburgh, have two children: a son Clifford, who is employed by the Standard Oil Company, and a daughter, Mrs. Dennis La Marche, wife of the Postmaster at Plattsburgh.

Clicks from the Rails

Wheel Rolling Contest

A car wheel rolling contest, in which the skill of the competitors was tested for speed and putting the 800-pound wheels through difficult antics, was recently staged between colored teams representing the Pennsylvania and Norfolk and Western Railroad shops of Columbus and Roanoke, respectively. Last year, a similar event between the same rivals, the first wheel rolling contest in the world, was declared a tie. In the 1931 contest, however, the Norfolk and Western rollers were adjudged the better by a score of 40 to 36.

Elevator Statistics

Two elevator operators in the Norfolk and Western's office building tabulated the "mileage" they traveled up and down in a day. In one day they averaged 420 round trips of 200 feet each, so they traveled the equivalent of a trip to Yellowstone National Park and back in one year. One operator went so far as to figure that in one year 6,408,720 people use the two elevators. If these people averaged 125 pounds apiece, a conservative estimate, the elevators lift and lower a total of 399,545 tons in a year.

Engineer Commended

Engineer White, of the Erie Railroad's Train Number 5, was recently highly commended by the manager of a business firm at Corry for his prompt action in averting a collision in that city. A woman driver, intending to go forward, put her car in reverse and backed up on the crossing directly in the path of number 5. Engineman White, although only one hundred feet from her car at the time, stopped the train in time to prevent an accident. The manufacturer, who witnessed the incident, complimented Mr. White in a letter to the president of the Erie.

Agent Saves Life

J. B. Kegley, station agent at Ivor, Va., recently noticed an aged man about to cross the tracks in front of the fast passenger train "The Cannon Ball." Rushing from his station Mr. Kegley pulled the man from the tracks just before the limited hurtled by. The man, an 85-year-old resident of Ivor, later stated that he knew nothing of the train's approach until he was pulled from its path by Agent Kegley.

Seafood Traffic

The movement of seafood over the Southern Pacific is studied closely, for it is a source of considerable revenue. It is estimated that 2,000,000 pounds of shrimp and oysters originate annually in Louisiana, while the yearly total of fish, crab meat and frogs approximates 7,500,000 pounds. While frogs are not strictly classified as seafood, they have become an important item in recent years.

Rail Centennial

On December 19, 1931, the Clinton & Vicksburg Railroad Company, now part of the illinois Central, celebrated its one hundredth anniversary. One hundred years before the line received its charter from the Mississippi Legislature and laid plans for a 35-mile railroad. Seven years later the railroad's first locomotive, *The Commercial*, operated over the first few miles of its tracks.

Window Opener

Jokes about car windows that stick will soon be obsolete in Germany. Levers do the trick. Without rising from his seat the traveler grasps the small lever at the window sill, opening the window quickly and easily. The device has been installed in sleeping cars and its use on day coaches is being considered.

Catcher-Engineer-Commissioner

George Block, recently chosen commissioner of public property of Paducah, Ky., was for fifteen years a fireman and engineman, he played with the St Louis Cardinals for one season, and managed two championship baseball clubs, those of Dyersburg, Tenn., and St. Petersburg, Fla., the latter winning three pennants under his management. In 135 games as a catcher he made but one error and hit safely 53 times out of 100 trips to bat. He points proudly of the fact that his is the largest home in Kentucky, "it covers five Blocks."

Time Bomb Clock Found

A Southern Pacific Detective recently came upon an army kit lying on an oil tank car. Upon investigation he found inside a clock especially constructed for use in setting off high explosives. Although sufficient wires were lacking to render it inoperative, with minor repairs it could have been used to destroy several cars in one blast.

Sneeze Halts Train

Hay fever and false teeth held up the Union Pacific's passenger train No. 19 for 5 minutes recently. The fireman, a victim of hay fever, sneezed, and his false teeth fell out of the cab window. The engineman stopped the train while crew and passengers searched for the missing means of mastication. They were finally found under the sixth car.

Train Riders De Luxe

A special railroad agent in the west, inspecting a freight train in the west while the 1931 world series was in progress, came upon an empty furniture car in which a train rider was assembling a radio set so that he and his "buddies" could get the latest sports news.

A Happy New Year

TO leave the old with a burst of song,
To recall the right and forgive the wrong;
To forget the thing that binds you fast
To the vain regrets of the year that's past;
To have the strength to let go your hold
Of the not worth while of the days grown old,
To dare to go forth with a purpose true,
To the unknown task of the year that's new;
To help your brother along the road
To do his work and lift his load;
To add your gift to the world's good cheer,
Is to have and to give a Happy New Year.

—ROBERT BREWSTER BEATTIE.